

### REMARKS

The Office Action dated April 30, 2008 has been received and carefully studied.

A Notice of Appeal was filed on May 23, 2008 and received on May 27, 2008. Accordingly, a two-month extension of time is submitted herewith, together with a Request for Continued Examination.

The Examiner maintains the rejection of claims 1, 2, 4, 5, and 23 under 35 U.S.C. §102(b) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over Brown '248. The Examiner also rejects claims 6,7 and 18-21 as being unpatentable over Brown in view of Regunathan, et al.; claims 8, 10-12 and 22 as being unpatentable over Brown in view of Regunathan et al. and further in view of Whittier et al.; claims 13-16 as being unpatentable over Brown in view of Regunathan et al. in view of Whittier et al., and further in view of Burrows; claim 9 as being unpatentable over Brown in view of Regunathan et al. and further in view of Whittier et al., and further in view of Petrucci et al.; and claim 17 as being unpatentable over Brown in view of Regunathan et al. and further in view of Whittier et al., and further in view of Gundrum et al.

The rejections are respectfully traversed.

The Examiner states on page 3 of the Office Action that the cartridge of Brown "is a reverse osmosis cartridge including a cylindrical enclosure (column 12 lines 48-50), a hollow, perforated, central innermost tube (62), . . .". As clearly seen in FIG. 5 of Brown, the tube 62 is an innermost tube with respect to the cartridge 60. However, the instant claim 1 does not recite this. Instead, claim 1 expressly recites that the central innermost tube of the reverse osmosis cartridge is the central innermost tube of the cylindrical container in which the cartridge is contained. It is not just the innermost tube of the cartridge. This is clearly illustrated in FIG. 3 of the instant application, as innermost tube 53. In stark contrast, the central **innermost** tube of Brown is carrier tube 77, which is positioned within the mounting tube 62. See column 8, lines 6-7 and FIG. 5 of Brown. Accordingly, the rejection under 35 U.S.C. §102(b) is clearly erroneous, and withdrawal thereof is respectfully requested.

The Examiner states that if the tube (62) is not considered to be the innermost tube of the container, it would have been obvious to remove the post-filter 75 should it be desirable to replace less than the entire filter cartridge 60, citing column 10, lines 38-42. However, this disclosure of Brown suggests only that removal of the post-

filter can be done independently of removal of the filter cartridge should it be desirable to replace less than the entire filter cartridge. That is, Brown only teaches the temporary removal of the post-filter to replace it with another fresh post-filter, not to operate the device without a post-filter. Brown nowhere suggests that the post-filter is in any way optional; Brown expressly discloses that its function is to remove organics, such as dissolved hydrocarbon gases, by adsorption. Indeed, were the device operated without a post-filter, the design of the tube 62 would have to change, since at the very least the permeate apertures 73 which allow the flow of permeate into the post-filter would no longer be necessary or desired.

In addition, the Examiner considers the pretreatment means of Brown to be element 72, housed in the "external space", and the treatment means to be element 70, housed in the "internal space". However, Brown expressly teaches that both the prefilter 72 and the permeator 70 are part of the filter cartridge 60. They thus form a single integral unit (indeed, they are both spirally wound on the mounting tube 62). In contrast, the instant claim 1 expressly requires that the pretreatment means be housed in the external cylindrical space of the container, and the cartridge be housed in the internal cylindrical space of the container.

This means that the instantly claimed cartridge is distinct from, and cannot include, the pretreatment means. By providing a separate cartridge for the treatment means, the present invention has the advantage of changing that cartridge without also changing the pretreatment means. This is nowhere disclosed or suggested by Brown.

The Examiner states that the Brown cartridge is a reverse osmosis cartridge "including a cylindrical enclosure", and cites column 12, lines 48-50 in support of this statement. However, the Brown patent ends at column 12, line 44; lines 48-50 do not exist. The Brown cartridge 60 is composed only of the inner permeator mounting tube 62, mounting spoke wheel 61, end cap 63, and the membrane permeator 70, prefilter 72 and impermeable barrier 71 positioned between them. It does not include a cylindrical enclosure (element 52 in the instant FIG. 3) as required by the instant claims.

None of the secondary references supplies the above-noted deficiencies of Brown.


In addition, to further distinguish the instant claims from the cited art, claim 1 has been amended to clarify that the cylindrical container includes a cylindrical wall closed at a first axial end by a head and closed at a second axial end by a bottom, and that the separator comprises a

cylindrical wall extending from the head to the bottom. Support for the amendment can be found on page 4, lines 3-9, for example. Dependent claims have been amended accordingly.

This claimed separator is now clearly different from the impermeable barrier 71 of Brown, which is an element of the replaceable cartridge 60 and is thus located only in the cartridge and does not extend from the head of the module to the bottom of the module. Indeed, were the barrier 71 of Brown to so extend, it would have to penetrate the end cap 63 of the Brown cartridge, and would block the fluid passageway necessary for fluid to flow from the prefilter 72 to the membrane permeator 70. The instant separator is part of the container, not the cartridge.

Reconsideration and allowance are respectfully requested in view of the foregoing.

Respectfully submitted,

  
Kevin S. Lemack

Reg. No. 32,579

176 E. Main Street - Suite 5  
Westboro, Massachusetts 01581  
TEL: (508) 898-1818